



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,471	10/20/2003	Tongbi Jiang	MCT.0015C2US (97-0524.04)	4162
7590 08/31/2005			EXAMINER	
Trop, Pruner & Hu, P.C. Suite 100 8554 Katy Freeway Houston, TX 77024			TRINH, MINH N	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 08/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,471

Applicant(s)

JIANG ET AL.

Examiner

Minh Trinh

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-38 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 34-38 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicants' amendment filed on 6/27/05 has been fully considered and made of record.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culp et al (4,490,217) in view of Suski et al (5,414,223) and/or Natarajan et al (US 5,519,580).

Culp et al disclose a method of making a stencil or solder mask having a plurality of segmental openings in a stencil plate 2' to define a central portion of the plate, a plurality of spokes 8' and a remainder of the stencil plate, said spokes connecting the central portion to the remainder of the plate between adjacent segmental annular openings (see Fig. 2). Culp et al do not teach the annular openings configuration in the stencil plate. However, Suski et al disclose such shape and configurations (see Fig. 2B of Suski et al, depicts the use of a solder mask having annular openings configurations or the similar concept has been disclosed by Natarajan et al, Fig. 4, which depicts stencil or mask 32 having tabs or spokes 26 connectively attached to central 28 and the remainder of the stencil plate 32. Therefore, It would have been an obvious to one having ordinary skill in the art at the time of the invention was made to employ the teaching provided by either Suski et al or Natarajan et al as described in

details above onto the method of forming stencil of Culp et al in order to form a desired stencil plate including size, shape and configuration requirements, etc.

As applied to claims 35-36, regarding the size and thickness configuration requirements. It would have been an obvious matter of design choice to choose any desired size, shape and thickness configurations as described above, since applicant has not disclosed that the features are critical features, and patentably distinguishing features and it appears that the invention would perform equally well with the size, shape and thickness configurations as shown in the prior art reference (see Figs. 2-4 of Natarajan et al).

Furthermore, it would have been an obvious matter of design choice to change in the size of a associated opening of a work piece, since such a modification would have involved a mere change in the size of a work piece. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Limitations of claims 37-38 noting Natarajan 's Fig. 4, depicts all the claimed features as recited in these claims.

Response to Arguments

4. Applicant's arguments with respect to rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Applicants' arguments have been acknowledged. However, the amendment to the claim languages has narrowed the scope of the claims and results in new ground(s) of rejection (see above).

Interviews After Final

5. Applicants note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing). Such an interview may be granted if the examiner is convinced that disposal or clarification for appeal may be accomplished with only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations which would require more than nominal reconsideration or new search will be denied. See MPEP 714.13 and 713.09.

Prior Art References

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art references are cited for their teaching of method of making a stencil or mask for solder paste.

Conclusion

7. It is noted that any amendment made to the disclosure and the claims. Applicant requires to point out the support provide numeral references to the claimed limitations as well as support in the disclosure (i.e., page and line numbers and reference number

Art Unit: 3729

associated with from the drawings) for better clarity (See 37CFR 1.111 and section 2163.06 of the MPEP).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3729

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mt

8/29/05

A handwritten signature in black ink, appearing to read 'Minh Trinh', followed by a long horizontal line extending to the right.

Minh Trinh
Primary Examiner